



Quantum Electronic Devices

The right image is a Quantum Point Contact, which is a narrow conducting InAs channel with side gates that modulate the ballistic electron conductance. The left image is a Small Quantum Ring, which is a small diameter, narrow wire with four one-dimensional modes for studying Aharonov-Bohm interference and the spin Berry phase. The image dimension is $3 \times 3 \mu\text{m}$.